

ABSTRACT OF THE DISCLOSURE

A processor preferably comprises a processing core that generates memory addresses to access a memory and on which a plurality of methods operate, a cache coupled to the processing core, and a programmable register containing a pointer to a currently active method's set of local variables. The cache may be used to store one or more sets of local variables, each set being used by a method. Further, the cache may include at least two sets of local variables corresponding to different methods, one method calling the other method and the sets of local variables may be separated by a pointer to the set of local variables corresponding to the calling method.

10